

Please amend the above-referenced application as follows:

IN THE SPECIFICATION

At page 13, line 10, after "primer", insert --; SEQ. I.D. NO.: 1 --.

At page 13, line 13, after "primer", insert --; SEQ. I.D. NO.: 2--.

At page 13, line 16, after "probe", insert --; SEQ. I.D. NO.: 3--.

IN THE CLAIMS

Please cancel claims 1-12.

Please add the following new claims:

13. An apparatus for monitoring the formation of a nucleic acid amplification reaction product in real time, the apparatus comprising:
a sample holder for holding a sample of nucleic acids to be amplified;
a fiber optic cable for illuminating a volume of the sample with an excitation beam;
a lens co-axially disposed with the fiber optic cable for focusing the excitation beam into the volume of the sample, the lens collecting from the sample and transmitting to the fiber optic cable a first fluorescent signal whose intensity is proportional to the concentration of the amplification reaction product in the volume of sample illuminated by the excitation beam and a second fluorescent signal whose intensity is proportional to the volume of the sample illuminated by the excitation beam; and
a detection and analysis mechanism for receiving the first and second fluorescent signals from the fiber optic cable.

14. The apparatus according to claim 13 wherein the first and second fluorescent signals each have an intensity and the detection and analysis mechanism provides a readout including a ratio between the intensity of the first fluorescent signal and the intensity of the second fluorescent signal.

15. The apparatus according to claim 13 wherein the apparatus includes a plurality of sample holders for holding a plurality of samples,

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